UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,923	06/21/2007	Daniel J. Rader	AGP-002	5393
51414 GOODWIN PR	7590 10/21/200 COCTER LLP	EXAMINER		
PATENT ADM	IINISTRATOR	WEDDINGTON, KEVIN E		
53 STATE STREET EXCHANGE PLACE BOSTON, MA 02109-2881			ART UNIT	PAPER NUMBER
			1614	
			NOTIFICATION DATE	DELIVERY MODE
			10/21/2009	ELECTRONIC

### Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PatentBos@goodwinprocter.com hmcpeake@goodwinprocter.com glenn.williams@goodwinprocter.com

	Application No. Applicant(s)				
	10/591,923	RADER, DANIEL J.			
Office Action Summary	Examiner	Art Unit			
	KEVIN WEDDINGTON	1614			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>05 Security</u> This action is <b>FINAL</b> . 2b)⊠ This      Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-25 is/are pending in the application.  4a) Of the above claim(s) is/are withdray  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-25 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or  Application Papers  9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ access that any objection to the company of the specific to the specifi	relection requirement. r. epted or b)□ objected to by the B				
Replacement drawing sheet(s) including the correcti  11) The oath or declaration is objected to by the Ex-					
Priority under 35 U.S.C. § 119	animor. Note the attached emice	7.00.017 01 101111 1 10 102.			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10-18-07; 10-24-07; 11-12-07.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte			

Claims 1-25 are presented for examination.

Applicant's information disclosure statements filed October 18, 2007; October 24, 2007 and November 12, 2007 have been received and entered.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-18, 20, 24 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is a written description rejection.

A lack of adequate written description issue arises if the knowledge and level of skill in the art would not permit one skilled in the art to immediately envisage the product claimed from the disclosed process. See, e.g., Fujikawa v. Wattanasin, 93 F.3d 1559, 1571, 39 USPQ2d 1895, 1905 (Fed. Cir. 1996) (a "laundry list" disclosure of every possible moiety does not constitute a written description of every species in a genus because it would not "reasonably lead" those skilled in the art to any particular species); In re Ruschig, 379 F.2d 990, 995, 154 USPQ 118, 123 (CCPA 1967).

An applicant may also show that an invention is complete by disclosure of sufficiently detailed, relevant identifying characteristics which provide evidence that

applicant was in possession of the claimed invention, i.e., complete or partial structure, other physical and/or chemical properties, functional characteristics when coupled with a known or disclosed correlation between function and structure, or some combination of such characteristics.

In particular, the specification as original filed fails to provide sufficient written bases of any of the agents demonstrating wherein possession of use of the broad terms: a disorder associated with hyperlipidemia and/or hypercholesterolemia and a further lipid modifying compound. The mere fact that Applicant may have discovered one type of disorder associated with hyperlipidemia and/or hypercholesterolemia is treating with a MTP inhibitor is not sufficient to claim the entire genus.

The mere fact that Applicant may have discovered one type of lipid modifying compound combined with a MTP inhibitor for treating a disorder associated with hyperlipidemia and/or hypercholesterolemia is not sufficient to claim the entire genus of a lipid modifying compound.

The written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species by actual reduction to practice, reduction to drawings, or by disclosure of relevant, identifying characteristics, i.e., structure or other physical and/or chemical properties, by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the applicant was in possession of the claimed genus. See Eli Lilly, 119 F.3d at 1568, 43 USPQ2d at 1406.

A "representative number of species" means that the species which are adequately described are representative of the entire genus. Thus, when there is substantial variation within the genus, one must describe a sufficient variety of species to reflect the variation within the genus. The disclosure of only one species encompassed within a genus adequately describes a claim directed to that genus only if the disclosure "indicates that the patentee has invented species sufficient to constitute the gen[us]."

Claims 1, 3-18, 20, 24 and 25 are not allowed.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-8, 14, 15, 17, 19 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Biller et al. (5,739,135).

Biller et al. teach inhibitors of microsomal triglyceride transfer proteins (MTP) that are useful for lowering serum lipids (see the abstract). Note column 60, lines 11-20 teaches the MTP inhibitors are effective for treating hypercholesterolemia, hypertrigylceridemia, hyperlipidemia, pancreatitis, hyperglycemia and obesity (disorders associated with hyperlipidemia and/or hypercholesterolemia. Note column 60, lines 21-25 teaches the MTP inhibitors can be administered orally. Note column 60, lines 36-42 teaches the MTP inhibitors can be administered to the subject in dosage forms in

amounts from about 5 to about 500 mg per day in single or divided doses of one to four times daily (intervals).

Clearly, the cited reference teaches every limitation of the applicant's instant methods for treating a subject suffering from a disorder associated with hyperlipidemia and/or hypercholesterolemia, and inhibiting MTP with amounts administered in intervals of one to four time daily (three step-wise) is anticipated. Therefore, the applicant's instant invention is unpatentable.

Claims 1-4, 6-8, 14, 15, 17, 19 and 22 are not allowed.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 14-16, 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Gregg et al. (5,883,109).

Gregg et al. teach a method for lowering serum lipid levels employing an MTP inhibitor in combination with another cholesterol lowering agent (see the abstract). Note column 20, lines 28-45 discloses the preferred MTP inhibitor, 9-[4-[-[[2-(2,2,2-trifluoroethoxy)benzoyl]amino]-1-piperidinyl]butyl-N-(2,2,2-trifluoroethyl)-9H-fluorene-9-carboxamide (same as applicant's preferred MTP inhibitor of claims 5 and 21). Note column 21, liens 25-67 to column 22, lines 1-63 shows the other cholesterol lowering agents can be the HMG CoA reductase inhibitors, fibrates, and bile acid sequestrants.

Application/Control Number: 10/591,923 Page 6

Art Unit: 1614

Note column 23, lines 1-7 shows the combination can be administered orally; lines 50-54 shows the combination can be administered to the subject in single or divided doses or one to four times daily.

Clearly, the cited reference teaches every limitation of the applicant's instant methods for treating a subject suffering from a disorder associated with hyperlipidemia and/or hypercholesterolemia, and inhibiting MTP with amounts administered in intervals of one to four time daily (three step-wise) is anticipated. Therefore, the applicant's instant invention is unpatentable.

Claims 1-8, 14-16 and 18-23 are not allowed.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-13, 17, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biller et al. (5,739,135) or Gregg et al. (5,883,109) in view of Dow (6,194,454 B1).

Biller et al or Gregg et al. were individually discussed above <u>supra</u> for the use of MTP inhibitors, including the preferred inhibitor, 9-[4-[-[[2-(2,2,2-trifluoroethoxy)benzoyl]amino]-1-piperidinyl]butyl-N-(2,2,2-trifluoroethyl)-9H-fluorene-9-carboxamide, are effective in treating disorders associated with hyperlipidemia and/or hypercholesterolemia. Note the administration of the MTP inhibitor(s) can be oral with a single or divided doses or one to four times daily.

The instant invention differs from the cited reference(s) in that cited reference(s) do not teach the amounts of each individual dose level (from one to five). However, one skilled in the art would have readily optimized effective doses as determined by good medical practice and the clinical condition of the individual. The specific dose may be calculated according to body weight, body surface area or organ size. Further refinement of the calculation necessary to determine the appropriate dose involving the above formulation is routinely made by those of ordinary skill in the art and it s within the ability of tasks routinely performed by them without experimentation.

The instant invention differs from the cited reference(s) in that cited reference(s) do not each the instant MTP inhibitors can be formulated into a kit. However, in column 24, lines 3-11 (Gregg et al.) teaches the active substances may be administered separately in individual dosage units (same a pharmaceutical dosage units) at the same time or carefully coordinated times. Also note Dow, column 21, line 56 through column

Application/Control Number: 10/591,923 Page 8

Art Unit: 1614

11, line 44 states that a kit comprises directions for the administration of the separate components (pharmaceutical dosage units) and are administered at different dosage intervals.

Clearly, to place the instant invention into a kit is old a well-known in the pharmaceutical art.

Claims 9-13, 17, 24 and 25 are not allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN WEDDINGTON whose telephone number is (571)272-0587. The examiner can normally be reached on 12:30 pm - 9:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571)272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

#### KEVIN WEDDINGTON

Application/Control Number: 10/591,923 Page 9

Art Unit: 1614

Primary Examiner Art Unit 1614

/KEVIN WEDDINGTON/ Primary Examiner, Art Unit 1614